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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/684,988

10/14/2003

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EXAMINER

NGUYEN, TANH Q

ART UNIT

PAPER NUMBER

2182

MAIL DATE

DELIVERY MODE

08/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/684,988

Applicant(s)

MOLL, LAURENT R.

Examiner

Tanh Q. Nguyen

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10, 29, 30 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 29, 30 and 32-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 29, 2007 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5, 9, 29, 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Beadle et al. (US 7,039,709).

4. As per claim 1, Beadle teaches a processing device [20, FIG. 1; col. 4, lines 48-51] comprising:

one or more resources within a node [col. 4, lines 53-55; col. 1, lines 35-38; col. 1, lines 48-53];

a plurality of peripheral bus interfaces [interfaces to 205, 207, 209, 211 - FIG. 2; interfaces to 305, 307, 309, 311 - FIG. 3; col. 6, lines 46-48] coupled to the one or more resources (network adapter 90 and modem 92 [ FIG. 1] coupled to processors, disk drives, CD ROM, memory devices [col. 1, lines 48-53]), and coupled to a peripheral bus fabric [205, 207, 209, 211, 215 - FIG. 2; 305, 307, 309, 311, 315 - FIG. 3] to support resource sharing with a plurality of other processing devices of other nodes when the other processing devices are coupled to the peripheral bus fabric [col. 4, lines 59-63; col. 5, lines 46-56; col. 6, lines 26-34];

a node ID register [connectivity table: col. 10, lines 24-27] including primary routing resources programmable with a plurality of addresses to determine a primary routing of a peripheral bus transaction among the plurality of peripheral bus interfaces based upon a destination address of the peripheral bus transaction [a first portion of the session with a first data type is routed via a first connection route in an embodiment in which only a single route may be connected at a given time during a session (col. 10, lines 37-39)]; and

the node ID register also including a node routing table [connectivity table: col. 10, lines 24-27] containing one or more override indications to determine one or more alternate override routing of peripheral bus transaction over the primary routing, and in which the primary routing for the peripheral bus transaction is overridden by one or more alternate override routing when the destination address and a type of transaction for the peripheral bus transaction is indicated by one or more override indications in the node routing table [e.g. when a new data type is detected, the new data type is routed

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via an alternate route (col. 10, lines 37-52)).

5. As per claim 3, Beadle teaches ignoring the alternate override routing based upon programmed contents of the node ID register [when a new data type is not detected, an alternate route is not needed (col. 10, lines 37-52)].

6. As per claim 5, Beadle teaches the peripheral bus transaction being an input / output peripheral bus transaction (e.g. input/output transaction to and from modem 92 or network adapter 90 - FIG. 1).

7. As per claim 9, Beadle teaches a primary port or a secondary port for a peripheral bus interface and the peripheral bus interface being used in an override routing of a peripheral bus transaction [FIG. 10].

8. As per claim 29, the claim generally corresponds to claim 1 and is rejected on the same basis. Note that the peripheral bus transaction is in accordance with the primary routing, unless the node routing table indicates an entry to override the primary routing based on the type of transaction for the peripheral bus transaction - when a new data type is detected.

9. As per claim 33, the claim generally corresponds to claim 5 and is rejected on the same basis.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 4, 6-8, 10, 30, 32, 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beadle et al..
12. As per claims 2, 30, Beadle does not teach a node ID of a destination processing device being based upon a set of most significant bits of the destination address of the peripheral bus transaction. Since it was known in the art for a destination address of a transaction over a network to comprise a destination node ID in the most significant bits and other information, and since it was known to use the destination node ID to properly route data through the network, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the destination node ID to be based on the most significant bits of the destination address in order to use the destination node ID to properly route data through the network.
13. As per claims 4, 32, since a cache coherency transaction is an I/O transaction and since applicant did not indicate that it is critical to apply alternate override routing to cache coherency transactions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply override routing to cache coherency transactions in order to provide alternative paths to the destination. In addition, Beadle teaches session information being cached and used in an alternate override routing when a session connection is lost [col. 11, lines 6-12], hence the alternate override routing for cache coherency peripheral bus transactions.
14. As per claims 6, 34, Beadle teaches the alternate override routing for input/output peripheral bus transactions (see the 102 rejection of claim 5 above), and the alternate

override routing for cache coherency peripheral bus transactions (see the 103 rejections of claims 4, 32 above).

15. As per claims 7-8, 35, Beadle also teaches switching to an alternate override routing being optional [col. 11, lines 26-32; FIG. 5B], hence the alternate override routing being selectively disabled, and using the primary routing when the alternate override routing is disabled; and network packets initially routed (i.e. via the primary routing) via a wireless LAN [col. 11, lines 40-43], hence a packet data peripheral bus transaction being initially designated for primary routing.

16. As per claim 10, Beadle does not explicitly teach the elements of each entry in the node ID register. Essentially, Beadle does not teach an override bit and a P/S indication for I/O transactions, and an override bit and P/S indication for cache coherency instructions. Such elements are implementation specific, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to include such elements instead of the connectivity table of Beadle, in order to effect primary routing and alternate override routing.

### ***Response to Arguments***

17. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tanh Q. Nguyen whose telephone number is 571-272-4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q. NGUYEN  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100



August 6, 2007

TQN  
August 6, 2007